



LEXAN™ Resin 4701R

Europe-Africa-Middle East: COMMERCIAL

LEXAN 4701R is a copolymer of polyphthalate carbonate resin for applications requiring high heat resistance. This grade has higher heat properties compared to LEXAN 4501.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yield, 50 mm/min	70	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	7	%	ISO 527
Tensile Strain, break, 50 mm/min	>50	%	ISO 527
Tensile Modulus, 1 mm/min	2300	MPa	ISO 527
Flexural Modulus, 2 mm/min	2300	MPa	ISO 178
Hardness, Rockwell R	127	-	ISO 2039-2
IMPACT			
Izod Impact, unnotched 80*10*3 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*3 -30°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*3 +23°C	35	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	11	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	46	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	13	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm	NB	kJ/m ²	ISO 179/1eU
THERMAL			
Thermal Conductivity	0.21	W/m-°C	ISO 8302
CTE, 23°C to 80°C, flow	8.E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	185	°C	ISO 306
Vicat Softening Temp, Rate B/50	175	°C	ISO 306
Vicat Softening Temp, Rate B/120	170	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	165	°C	ISO 75/Be



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THERMAL			
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	150	°C	ISO 75/Ae
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.9	%	SABIC Method
Density	1.2	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 300°C/5.0 kg	6	cm ³ /10 min	ISO 1133
ELECTRICAL			
Relative Permittivity, 1 MHz	3.1	-	IEC 60250
Dissipation Factor, 100 Hz	0.026	-	IEC 60250
FLAME CHARACTERISTICS			
Glow Wire Flammability Index 850°C, passes at	2	mm	IEC 60695-2-12



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	125 - 135	°C
Drying Time	3 - 4	hrs
Melt Temperature	325 - 360	°C
Nozzle Temperature	320 - 340	°C
Front - Zone 3 Temperature	320 - 340	°C
Middle - Zone 2 Temperature	310 - 330	°C
Rear - Zone 1 Temperature	300 - 320	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	100 - 125	°C